What is Claimed:

1.   A method for electric utility storm outage management, the method comprising:

determining an interconnection model of an electric utility power circuit, the power circuit comprising power circuit components;

determining information indicative of weather susceptibility of the power circuit components;

determining a weather prediction; and

determining a predicted maintenance parameter based on the interconnection model, the weather susceptibility information, and the weather prediction.

2.   The method as recited in claim 1, further comprising determining an observation of the power circuit, and wherein determining the predicted maintenance parameter comprises determining the predicted maintenance parameter based on the interconnection model, the weather susceptibility information, the weather prediction, and the power circuit observation.

3.   The method as recited in claim 2, wherein the observation comprises at least one of a power consumer observation report, a data acquisition system report, and a maintenance crew report.

4.   The method as recited in claim 1, wherein determining the weather susceptibility information comprises determining at least one of power line component age, power line pole age, power line component ice susceptibility, and power line component wind susceptibility.

5.   The method as recited in claim 1, wherein the weather prediction comprises at least one of predicted wind speed, a predicted storm duration, a predicted snowfall amount, a predicted icing amount, and a predicted rainfall amount.

6.   The method as recited in claim 1, wherein the predicted maintenance parameter comprises a predicted maintenance crew requirement.

7.   The method as recited in claim 6, wherein determining the predicted maintenance crew requirement comprises determining a predicted maintenance crew person-day requirement based on a predicted damage type.

8.   The method as recited in claim 1, wherein the predicted maintenance parameter comprises a prediction of a location of power consumers affected by the predicted power circuit damage.

9.   The method as recited in claim 1, wherein the predicted maintenance parameter comprises a prediction of a time to repair the predicted power circuit damage.

10.   The method as recited in claim 1, wherein the predicted maintenance parameter comprises a prediction of a cost to repair the power circuit damage.

11.   The method as recited in claim 1, wherein determining the predicted maintenance parameter comprises determining a predicted amount of damage to the power circuit.

12.   The method as recited in claim 11, wherein the predicted amount of damage comprises at least one of a predicted number of broken power poles, a predicted number of downed power lines, and a predicted number of damaged power transformers.

13.   The method as recited in claim 1, further comprising maintaining a computing system that predicts the maintenance parameter based on the interconnection model, the weather susceptibility information, and the weather prediction and updating the computing system based on historical information.

14.   A system for electric utility storm outage management, the system comprising:
          a computing engine that is configured to perform:
               determining an interconnection model of an electric utility power circuit, the power circuit comprising power circuit components;
               determining information indicative of weather susceptibility of the power circuit components;

determining a weather prediction; and

determining a predicted maintenance parameter based on the interconnection model, the weather susceptibility information, and the weather prediction.

15.   The system as recited in claim 14, wherein the computing engine comprises:

a damage prediction engine that is capable of performing:

determining a weather prediction; and

determining a per-unit damage prediction; and

a storm outage engine that is capable of performing:

determining an interconnection model of an electric utility power circuit, the power circuit comprising power circuit components;

determining information indicative of weather susceptibility of the power circuit components; and

determining a total damage prediction based on the interconnection model, the weather susceptibility information, and the per-unit damage prediction.

16.   The system as recited in claim 15, wherein the computing engine further comprises:

a maintenance crew prediction engine that is capable of performing:

determining a predicted maintenance crew requirement for each type of damage predicted; and wherein

the storm outage engine is further capable of performing:

determining a predicted total time to repair the damage based on the total damage prediction and the predicted maintenance crew requirement for each type of damage.

17.   The system as recited in claim 14, wherein the computing engine is further capable of performing determining an observation of the power circuit, and wherein determining the predicted maintenance parameter comprises determining the predicted maintenance parameter based on the interconnection model, the weather susceptibility information, the weather prediction, and the power circuit observation.

18.   The system as recited in claim 14, wherein determining the weather susceptibility information comprises determining at least one of power line component age, power line pole age, power line component ice susceptibility, and power line component wind susceptibility.

19.   The system as recited in claim 14, wherein the weather prediction comprises at least one of predicted wind speed, a predicted storm duration, a predicted snowfall amount, a predicted icing amount, and a predicted rainfall amount.

20.   The system as recited in claim 14, wherein the predicted maintenance parameter comprises a prediction of a location of power consumers affected by the predicted power circuit damage.

21.   The system as recited in claim 14, wherein the predicted maintenance parameter comprises a prediction of a time to repair the predicted power circuit damage.

22.   The system as recited in claim 14, wherein the predicted maintenance parameter comprises a prediction of a cost to repair the power circuit damage.

23.   The system as recited in claim 14, wherein determining the predicted maintenance parameter comprises determining a predicted amount of damage to the power circuit.

24.   The system as recited in claim 23, wherein the predicted amount of damage comprises at least one of a predicted number of broken power poles, a predicted number of downed power lines, and a predicted number of damaged power transformers.

25.   The system as recited in claim 14, wherein the computing engine is further capable of performing maintaining a computing system that predicts the maintenance parameter based on the interconnection model, the weather susceptibility information, and the weather prediction and updating the computing system based on historical information.

26.   A method for electric utility storm outage management, the method comprising:

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determining an interconnection model of an electric utility power circuit, the power circuit comprising power circuit components;

determining a location of damage on the power circuit;

determining a restoration sequence based on the damage location and the interconnection model; and

determining a predicted time to restore power to a particular customer of the electric utility based on the restoration sequence, the interconnection model, and the location of the damage.

27.   The method as recited in claim 26, wherein determining the predicted time comprises determining the predicted time to restore power to the particular customer based on the restoration sequence, the interconnection model, the location of the damage, and a predicted maintenance crew requirement. .

28.   The method as recited in claim 27, wherein determining the predicted maintenance crew requirement comprises determining a predicted maintenance crew person-day requirement based on a predicted damage type.

29.   The method as recited in claim 26, wherein determining the restoration sequence comprises determining the restoration sequence based on a number of customers for each transformer of the power circuit.

30.   The method as recited in claim 29, wherein determining the restoration sequence comprises determining the restoration sequence based on a number of customers for each transformer of the power circuit and based on a priority of a customer.

31.   A system for electric utility storm outage management, the system comprising:

a computing engine that is configured to perform:

determining an interconnection model of an electric utility power circuit, the power circuit comprising power circuit components;

determining a location of damage on the power circuit;

determining a restoration sequence based on the damage location and the interconnection model; and

determining a predicted time to restore power to a particular customer of the electric utility based on the restoration sequence, the interconnection model, and the location of the damage.

32.   The system as recited in claim 31, wherein determining the predicted time comprises determining the predicted time to restore power to the particular customer based on the restoration sequence, the interconnection model, the location of the damage, and a predicted maintenance crew requirement. .

33.   The system as recited in claim 32, wherein determining the predicted maintenance crew requirement comprises determining a predicted maintenance crew person-day requirement based on a predicted damage type.

34.   The system as recited in claim 31, wherein determining the restoration sequence comprises determining the restoration sequence based on a number of customers for each transformer of the power circuit.

35.   The system as recited in claim 34, wherein determining the restoration sequence comprises determining the restoration sequence based on a number of customers for each transformer of the power circuit and based on a priority of a customer.

36.   A method for electric utility storm outage management, the method comprising:

determining an interconnection model of an electric utility power circuit, the power circuit comprising power circuit components;

determining assessed damages to the electric utility power circuit; and

determining a predicted maintenance parameter based on the interconnection model and the assessed damages.

37.   The method as recited in claim 36, wherein the assessed damages comprises at least one of a power consumer observation report, a data acquisition system report, and a maintenance crew report.

38.   The method as recited in claim 36, wherein the predicted maintenance parameter comprises a predicted maintenance crew requirement.

39.   The method as recited in claim 38, wherein determining the predicted maintenance crew requirement comprises determining a predicted maintenance crew person-day requirement based on an assessed damage type.

40.   The method as recited in claim 36, wherein determining the predicted maintenance parameter comprises determining a prediction of a time to repair the assessed power circuit damage.

41.   The method as recited in claim 36, wherein determining the predicted maintenance parameter comprises determining a prediction of a cost to repair the assessed power circuit damage.

42.   The method as recited in claim 36, further comprising determining a restoration sequence based on the assessed damages and the interconnection model.

43.   The method as recited in claim 42, wherein determining the predicted maintenance parameter comprises determining the predicted maintenance parameter based on the restoration sequence, the interconnection model, and the assessed damages.

44.   The method as recited in claim 43, wherein determining the predicted maintenance parameter comprises determining a predicted maintenance crew requirement.

45.   The method as recited in claim 44, wherein determining the predicted maintenance parameter comprises determining a predicted time to restore power to the particular

customer based on the restoration sequence, the interconnection model, the assessed damages, and the predicted maintenance crew requirement.

46.   The method as recited in claim 44, wherein determining the predicted maintenance crew requirement comprises determining a predicted maintenance crew person-day requirement based on an assessed damage type.

47.   The method as recited in claim 42, wherein determining the restoration sequence comprises determining the restoration sequence based on a number of customers for each transformer of the power circuit.

48.   The method as recited in claim 47, wherein determining the restoration sequence comprises determining the restoration sequence based on a number of customers for each transformer of the power circuit and based on a priority of a customer.